Opinion of the United States Court of Appeals for the Federal Circuit

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

95-1101

MARK I MARKETING CORPORATION and MARK I MARKETING CORPORATION OF AMERICA,

Plaintiffs-Appellants,

v.

R.R. DONNELLEY & SONS COMPANY,

Defendant-Appellee.

DECIDED: September 14, 1995

Before NIES, MAYER, and LOURIE, Circuit Judges.

LOURIE, Circuit Judge.

Mark I Marketing Corporation and Mark I Marketing Corporation of America (collectively "Mark I") appeal from the order of the United States District Court for the Northern District of Illinois granting summary judgment of noninfringment in favor of R.R. Donnelley &

Sons Company ("Donnelley"). *Mark I Mktg. Corp. V. R.R. Donnelley & Sons Co.*, No. 92 C 8380 (N.D. Ill. Nov. 1, 1994). Because prosecution history estoppel precludes Mark I from asserting infringement under the doctrine of equivalents, we affirm.

BACKGROUND

Color images in magazines, books, and newspapers are conventionally formed by a process that uses four printing plates and the four "process" inks (cyan, magenta, yellow, and black). In this process, four films or "separations" are first made by scanning an original color image with an electronic scanner or by photographing the image through different colored filters.[1] Once the separations are prepared, they are used to make four printing plates, each one corresponding to a process ink color. When used in combination, the printing plates generate a four-color. When used in combination, the printing plates generate a four-color image which, to the

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[1] When a photographic process is used, the filters are of colors complementary to the process ink colors. Thus, three separations are made by separately photographing the original image through red, blue, and green filters; the separations are used to make printing plates that will print cyan, yellow, and magenta inks, respectively. A fourth separation, used to make a printing plate that will print black ink, is made either by photographing the original through a combination of red, blue, and green filters, or by

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naked eye, appears to encompass the entire spectrum of colors and shades.

For certain printing applications, such as the printing of telephone directories, newspapers, and advertising flyers, the conventional four-color separation process is prohibitively expensive due to the need to prepare and use four printing plates. The invention disclosed and claimed is U.S. Patent 4,554,241[2] addresses this problem by providing a process for printing color images on paper using only two printing plates and two "non-process" inks. Wallace Edwards is the inventor of this process and the chairman and chief executive officer of Mark I. Edwards assigned his rights in the invention to Mark I.[3]

The '241 patent discloses a process in which each of two printing plates is created by sequentially making two different filter exposures of an original color image on a separation film. The first printing plate, which prints red ink, is made by sequentially exposing a separation film through green and blue filters. The second plate, which

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photographing the original in black and white.

[2]The '241 patent issued from application Serial No. 712,659, filed March 18, 1985, which was a continuation-in-part of Serial No. 595,815, filed April 2, 1984. The '815 application was itself a continuation-in-part of Serial No. 485,668, filed April 18, 1983.

[3]For simplicity we will refer only to Mark I when discussing the '241 invention and the prosecution history of the '241 patent.

prints another non-process ink such as green, blue, or black ink, is made by sequentially exposing a separation film through red and blue filters. Claim 1 of the patent, which is the focus of this litigation, defines the invention as follows:

> 1. A method of printing on a sheet member a realistic reproduction of a colored original, utilizing a minimum of two different superimposed impressions, each with a different coloring medium, comprising:
>
> (a) providing a colored original,
>
> (b) creating a first printing plate intended to print a non-process red color, by
>
> (1) making a green filter exposure of the original on a first means for recording a first optical image,
>
> (2) making a blue filter exposure of the original on said first means,
>
> steps (1) and (2) being carried out sequentially in any order,
>
> (c) creating a second printing plate intended to print a second color different from that printed by said first plate, by
>
> (3) making a red filter exposure of the original on a second means for recording a second optical image,

(4) making a blue filter exposure of the original on said second means,

steps (3) and (4) being carried out sequentially in any order,

steps (b) and (c) being carried out in any order,

(d) providing a sheet member to receive two superimposed impressions, and

(e) using said first and second printing plates to print said red color and said different color, respectively, as the said superimposed impressions on said sheet member [emphasis added].

The patent specification indicates that either photographic or scanning techniques may be used to carry out the invention:

> Each film is exposed sequentially through the two filters or with the equivalent two lights on [a] conventional scanner.
>
> ....
>
> It is emphasized again that the interposition of actual colored filters between the original and a means for recording an optical image (such as a piece of film) is not the only way to create the appropriate printer. The presently available scanner machines accomplish the same effect

> by illuminating the original with light of a particular color. In the ... claims, reference is made to "making a... filter exposure", etc., and it is to be understood that this wording is intended to embrace those techniques which do not actually require a physical filter to be interposed, but which achieve exactly the same effect as if the filter had been interposed.

Col. 3, 11. 42-44; col. 6, 11. 6-17.

Donnelley is in the business of producing Yellow Pages telephone directories. It prints color images for its directories using a commercially available Crosfield scanner and two non-process inks. The scanner focuses a single beam of white light on a small area (a "pixel") of the colored original. The light reflects back into the scanner where it is split into three separate light beams. The beams are then simultaneously filtered through red, green, and blue filters within the scanner. Next, the scanner senses the intensities of the beams and converts this information into digital values which are stored in memory. The scanner repeats this process for each pixel until the entire image has been scanned. To create separations, the scanner analyzes the stored data to determine the size and density of the various ink dots needed to replicate each pixel's color. It then converts the data into electrical impulses, sends the impulses to light sources (lasers or lamps), and pulses the light sources to expose tiny spots on separation films. Each spot of film is

either exposed only once or is not exposed at all. The resulting separations are used to make printing plates, which in turn are used to print images in Donnelley's telephone directories.

Mark I sued Donnelley alleging infringement of the '241 patent.[4] Donnelley denied the allegation and moved for summary judgment of noninfringement, arguing that it did not literally infringe the patent because it did not use filters sequentially or make sequential exposures of film. In addition, Donnelley argued that its process was known and used before the '241 invention and therefore that the doctrine of equivalents was not applicable. *See Wilson Sporting Goods Co. V. David Geoffrey & Assoc.*, 904 F.2d 677, 684, 14 USPQ2d 1942, 1948 (Fed. Cir. 1990) ("[S]ince prior art always limits what an inventor could have claimed [during prosecution], it limits the range of permissible equivalents of a claim."). Donnelley further argued that prosecution history estoppel precludes Mark I from establishing infringement under the doctrine of equivalents. In response, Mark I essentially conceded that Donnelley did not literally infringe the '241 patent, but argued that genuine issues of material fact precluded summary judgment in Donnelley's favor on Mark I's

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[4] The lawsuit was originally brought in the United States District Court for the Southern District of New York, but was transferred on Donnelley's motion to the United States District Court for the Northern District of Illinois.

theory of infringement under the doctrine of equivalents.

The district court referred Donnelley's motion to a magistrate judge, who issued a Report and Recommendation on June 10, 1994. The magistrate judge determined that prosecution history estoppel precluded Mark I from proving infringement under the doctrine of equivalents and thus recommended that the court grant summary judgment of noninfringement. The district court, deciding the motion independently, granted summary judgment on a different ground. The court determined that Mark I did not refute Donnelley's factual assertion that the accused process was in the prior art and thus that it could not infringe the patent under the doctrine of equivalents. The court found that Mark I, through the affidavit of its expert, had only asserted that the '241 patent was not invalid, even though Donnelley never challenged the patent's validity. Thus, in the court's view Mark I failed to raise a genuine issue of material fact concerning Donnelley's theory of noninfringement. In granting summary judgment, the court found it unnecessary to determine whether prosecution history estoppel precluded Mark I from establishing infringement under the doctrine of equivalents. This appeal followed.

DISCUSSION

Summary judgment is appropriate when there is no genuine issue as to any material fact and the moving

party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *Johnston v. IVAC Corp.*, 885 F.2d 1574, 1576-77, 12 USPQ2d 1382, 1383 (Fed. Cir. 1989). Thus, summary judgment may be granted when no "reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986). In determining whether there is a genuine issue of material fact, the evidence must be viewed in the light most favorable to the party opposing the motion, with doubts resolved in favor of the nonmovant. *Transmatic, Inc. V. Gulton Indus., Inc.*, 53 F.3d 1270, 1274, 35 USPQ2d 1035, 1038 (Fed. Cir. 1995). We review *de novo* a district court's grant of summary judgment. *Conroy v. Reebok Int'l, Ltd.*, 14 F.3d 1570, 1575, 29 USPQ2d 1373, 1377 (Fed. Cir. 1994).

Mark I does not contest the court's determination that Donnelley did not literally infringe the '241 patent. Rather, Mark I asserts that the court erred in holding that Mark I did not refute Donnelley's assertion that the accused process cannot infringe the '241 patent because it is a prior art process. Mark I further argues that the question of prosecution history estoppel raises genuine issues of material fact precluding a grant of summary judgment. Donnelley responds that the court correctly granted summary judgment because Mark I did not dispute Donnelley's contention that it practices the prior art. Alternatively, Donnelley contends that prosecution history estoppel precludes application of the doctrine of

equivalents in this case.

Having thoroughly reviewed the record, we have concluded that the district court's judgment should be affirmed on the ground of prosecution history estoppel. Although the district court did not reach this question, "[b]ecause this issue is purely legal and was fully briefed to the district court, in the interests of economy, this court will decide [the issue] on the merits ...." *Du Pont Merck Pharmaceutical Co. V. Bristol-Myers Squibb Co.*, No. 95-1410, slip op. At 7 (Fed. Cir. Aug. 8, 1995). To determine whether prosecution history estoppel precludes Mark I from establishing infringement under the doctrine of equivalents, we must review the prosecution history of the '241 patent.

A. Prosecution History of the '241 Patent

Mark I filed the "grandparent" application to the '241 patent, Serial No. 485,668, on April 18, 1983. The '668 application broadly claimed a process of simulation colored originals by printing with two different colored inks. Claim 1 of the application required the formation of two separation, but, importantly, it did not require that either separation be made by sequentially interposing two different filters:

> 1. A method of printing on a sheet member a realistic image of an original utilizing two different superimposed impressions with two different inks, comprising:

making a first film and therefrom a first plate adapted to print a first ink having a first hue at all locations corresponding to a first colour predominating in the original,

making a second film and therefrom a second plate adapted to print a second ink having a second hue at locations such that the second ink in relation to the first ink seen against the sheet gives to the eye the impression of a third hue present in the original but not present in either the first or second inks,

coating the plates with their respective inks, and

printing the sheet member with the plates.

In a first Office Action, the U.S. Patent and Trademark Office (PTO) rejected claim 1 under 35 U.S.C. § 102 as being anticipated by a *Du Pont Magazine* article entitled "Multicolor Effects on Two-Color Presses." The article describes two-color printing on colored paper and, in particular, suggests the use of "two printing plates to blend red and blue ink on yellow paper." The PTO also rejected claims 1-5 under 35 U.S.C. §103 as being obvious over the *Du Pont Magazine* article in view of three secondary references. The Office Action was conclusory and did not discuss the cited references or articulate any reasons supporting the rejections.

Mark I, however, did not respond to the Office Action. Instead, it filed a continuation-in-part application. The claims originally filed in that application also required the use of two printing plates and, like the '668 application, did not require that either printing plate be made by sequentially interposing filters. Claim 1 of the '815 application read as follows:

> 1. A method of printing on a sheet member a realistic image of an original, utilizing two different superimposed impressions with two different colouring media, comprising:
>
> creating a first printing plate by the interposition of at least two filters between the original and means for recording a first optical image,
>
> creating a second printing plate by the interposition of at least one filter between the original and means for recording a second optical image,
>
> and using said first and second plates to print the said different impressions with two different colouring media.

On June 8, 1984, before receiving a first Office Action, Mark I amended claim 1 to require that the first, but not the second, printing plate be made by sequentially interposing two different colored filters. Specifically, claim 1 was amended to read as follows:

1. (amended) A method of printing on a sheet member a realistic image of an original, utilizing two different superimposed impressions with two different colouring media, comprising:

creating a first printing plate by the sequential interposition of at least two different colour filters between the original and means for recording a first optical image,

creating a second printing plate by the interposition of at least one filter between the original and means for recording a second optical image,

and using said first and second plates to print the said different impressions with two different colouring media.

Then, in July 1984, Mark I filed a Petition to Make Special pursuant to M.P.E.P. § 708.02.VIII.[5] In the petition, Mark I characterized the claimed invention as

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[5] Section 708.02 VIII of the Manual of Patent Examining Procedure ("M.P.E.P.") permits an accelerated examination of a patent application for which a pre-examination search of the prior art has been conducted. The applicant must, *inter alia*, submit copies of the most pertinent prior art references located by the search and provide "a detailed discussion of the references, which...points out, with the particularity required by 37 CFR 1.111(b) and (c), how the claimed subject matter is distinguishable over the references."

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follows:

> The applicant...has discovered an alteration in the film-producing step typically employed in the four-colour separation process which alteration is such as to allow a stunningly realistic reproduction of an original in only two inks....
>
> The alteration...involves, in the case of the use of film, the double exposure of the film using two different filters sequentially [emphasis added].

In addition, quoting language from claim 1, Mark I distinguished the claimed process from several prior art references cited in its accompanying search report on the ground that the references did not suggest " the 'sequential interposition of at least two different colour filters between the original and means for recording a first optical image [emphasis added].'"

Despite Mark I's attempt to distinguish the claimed invention from the prior art based on the claim limitation that the first separation be made by sequentially interposing two filters, the PTO, in a September 18, 1984 Office Action, rejected claims 1 and 4-10 of the '815 application under 35 U.S.C. §103 as being obvious over *The Lithographers Manual*, Vol. I (Waltwin Pub. 1958) in

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M.P.E.P. § 708.02.VIII (6th ed., Jan. 1995).

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view of the *Du Pont Magazine* article. *The Lithographers Manual* suggests making a printing plate using supplemental film exposures with different colored filters. The examiner took the position that it would have been obvious to apply the teachings of *The Lithographers Manual* to any conventional color processing technique, including the two-color process disclosed in the *Du Pont Magazine* article. Dependent claims 2 and 3 were also rejected on similar grounds.

Mark I again did not respond to the Office Action, but instead filed a second continuation-in-part application. That application contained new claims which required, for the first time, that each of the two recited printing plates be formed using two filters, and that both printing plates be made by sequentially making two different filter exposures of the original color image on a film. The application was allowed without comment by the examiner and issued as the '241 patent.

B. Prosecution History Estoppel

Prosecution history estoppel precludes a patentee from obtaining in an infringement suit patent protection for subject matter which it relinquished during prosecution in order to obtain allowance of the claims. *Zenith Lav., Inc. V. Bristol-Myers Squibb Co.*, 19 F.3d 1418, 1424, 30 USPQ2d 1285, 1290 (Fed. Cir.), *cert. denied*, 115 S.Ct. 500 (1994). It thus serves as a check on the

applicability of the doctrine of equivalents. The standard for determining whether particular subject matter was relinquished is an objective one that depends on what a competitor reasonably would conclude from the patent's prosecution history. *Id.* The application of prosecution history estoppel is a question of law. *LaBounty Mfg., Inc. v. Uniteds States Int'l Trade Comm'n*, 867 F.2d 1572, 1576, 9 USPQ2d 1995, 1998 (Fed. Cir. 1989).

"The prosecution history must be examined as a whole in determining whether estoppel applies." *Wang Lab., Inc. v. Toshiba Corp.*, 993 F.2d 858, 867, 26 USPQ2d 1767, 1775 (Fed. Cir. 1993). Thus, the relevant prosecution history here includes not only the '659 application but also the parent '815 and grandparent '668 applications. *See Jonsson v. Stanley Works*, 903 F.2d 812, 818, 14 USPQ2d 1863, 1869 (Fed. Cir. 1990) (prosecution history of parent application is relevant to understanding scope of claims issuing in a continuation-in-part application).

The prosecution history of the '241 patent indicates that the grandparent '668 application broadly claimed a process for reproducing color images by printing with two printing plates and two inks. The claims were rejected over prior art that suggested replication a color image using two printing plates and two inks. Instead of responding to the rejection, Mark I filed the '815 continuation-in-part application with new claims. Mark I then narrowed the '815 claims to require that the first

printing plate be made by sequentially interposing filters. Subsequently, in its Petition to Make Special, Mark I argued that the sequential interposition of filters distinguished the claimed invention from the prior art. The '815 application claims were then rejected over a combination of references which, in the PTO's view, suggested using supplemental film exposures in a two-color printing process. Rather than respond to the rejection, Mark I again chose to file a continuation-in-part application with new claims. The claims in the '659 application were even narrower than the '815 claims, and required that both plates be made by sequentially interposing colored filters.

Donnelley argues that the prosecution history of the '241 patent shows that Mark I surrendered claim coverage for a process not involving sequential interposition of colored filters. We agree. The prosecution history demonstrates that Mark I was unsuccessful in obtaining allowance of the claims until they were narrowed to require that both the first and the second printing plates be made by sequentially interposing particular combinations of colored filters. Moreover, during prosecution Mark I asserted that the claims were patentably distinguishable over the prior art based on these process steps. Thus, in our view a competitor reviewing the prosecution history of the '241 patent reasonably would conclude that, in order to procure issuance of the patent, Mark I surrendered claim coverage

to a process not involving sequential interposition of filters.

The fact that the claims of the '659 application were not themselves rejected by the Patent Office or amended by Mark I does not call for a different result. Mark I chose to file continuing applications with successively narrower claims in lieu of otherwise responding to the PTO's rejections, but an estoppel is not avoided by failing to respond to a rejection and instead meeting the substance of the rejection by filing a narrower continuing application. Rather, the prosecution history must be viewed as a whole to determine whether and what subject matter surrendered to procure issuance of the patent. Viewed in its entirety, the prosecution history of the '241 patent clearly shows that Mark I surrendered claim coverage in order to obtain an allowance of the claims.

Mark I argues that, at a minimum, the question of prosecution history estoppel raises genuine issues of material fact precluding a grant of summary judgment. We disagree. The relevant facts here are undisputed; the prosecution history of the '241 patent is a matter of public record. Moreover, the meaning of the prosecution history is clear. A competitor reviewing the '241 patent's prosecution history would not have to go beyond the public record to reasonably conclude that Mark I had relinquished claim coverage for a process not involving sequentially interposing colored filters.

We therefore hold that Mark I is estopped from asserting infringement by any process that does not involve a sequential interposition of colored filters. The accused process indisputably does not involve the sequential interposition of filters; rather, three light beams are simultaneously filtered through red, green, and blue filters within the scanner. Thus, no reasonable fact-finder could find that the accused process infringes the '241 patent; summary judgment of noninfringement was therefore appropriate. *See Brenner v. United States*, 773 F.2d 306, 307, 227 USPQ 159, 160 (Fed. Cir. 1985) (Summary judgment of noninfringement will be upheld on appeal when there is no literal infringement" and a prosecution history estoppel makes clear that no actual infringement under the doctrine of equivalents can be found.").

Because the prosecution history estoppel issue is dispositive, we need not decide whether the district court correctly ruled that Mark I failed to dispute Donnelley's contention that its process is prior art to the '241 patent.

CONCLUSION

The district court's grant of summary judgment of noninfringement in favor of Donnelley is affirmed.

AFFIRMED

Memorandum and Order of the United States District Court for the Northern District of Illinois

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

MARK I MARKETING CORPORATION and MARK I MARKETING CORPORATION OF AMERICA,	)	
Plaintiffs,	)	
	)	NO. 92 C 8380
v.	)	
	)	Hon. George W. Lindberg
R. R. DONNELLEY & SONS COMPANY,	)	
Defendant.	)	

MEMORANDUM AND ORDER

Plaintiffs Mark I Marketing Corporation and Mark I Marketing Corporation of America ("Mark I") brought suit against defendant R.R. Donnelley Company ("Donnelley") alleging that Donnelley has infringed U.S.

Patent No. 4,544,241 (the "'241 patent") originally issued to Wallace Edwards. The proceedings were referred to the assigned Magistrate Judge pursuant to 28 USC § 636 et seq.

Donnelley has moved for summary judgment on the issue of noninfringement as to both literal infringement and infringement under the doctrine of equivalents. The Magistrate Judge considered Donnelley's motion and issued a report and recommendation recommending that Donnelley's motion be granted. Mark I filed objections to the report and recommendation. This court has reviewed de novo the portions of the report and recommendation to which objections have been made. 28 USC § 636(b)(1); FRCP 72(b).

In its motion for summary judgment, Donnelley contends that it does not literally infringe the '241 patent and that, due to the doctrine of prosecution history estoppel and the prior art, Mark I is estopped from asserting the range of equivalents necessary to encompass Donnelley's accused process. Donnelley's motion for summary judgment is granted both with respect to literal infringement and as to noninfringement under the doctrine of equivalents.

I. FACTS

The '241 patent relates to a printing process used

to reproduce photographs and artwork. More specifically, the process described and claimed in the '241 patent consists of a two-color reproduction process used to generate a high quality reproduction of an image on low quality paper such as that used by Donnelley in its "Yellow Pages". The two-color process described in the '241 patent must be distinguished from the standard four-color separation process. The common four-color process cannot be used when the printing is to be made on low quality paper because the four colors tend to run into one another causing a blurry appearance.

Mark I alleges that Donnelley infringes its patented two-color process. Donnelley asserts that its use of a "Crosfield scanner" does not infringe claim one of the '241 patent because the Crosfield scanner does not sequentially expose the original to either different color filters or different color lights in the scanner. The Crosfield scanner operates as follows:

> (a) A single white light shines on a small area of the colored original called a "picture element," or "pixel" for short. That light is reflected into the scanner, where a beam splitter splits the reflected light into three beams which are filtered (simultaneously, not sequentially) through red, green, and blue filters, respectively. The scanner then measures the intensity of the resulting red, green, and blue beams and that information is converted into

electrical voltages. Those voltages are further converted (again, simultaneously, not sequentially) into digital values (numbers); i.e., the red, green, and blue color information is "digitized." That information is then stored in memory and processed as described below. The scanner repeats this process for each pixel until the completed original has been scanned.

(b) On the output side, the separation film is exposed only once; i.e., the film is not double exposed, much less sequentially double exposed as the patent requires. Briefly, the three respective digital values for the red, green, and blue information for a pixel are analyzed together and in relation to one another (again simultaneously, not sequentially) using complicated algorithms derived by the scanner manufacturer which calculate the size and density of the different colored dots of ink which must be laid down in order to simulate the color in the original. Of course, the size and density of those dots depend on the precise colors and types of inks to be used in the final printing stage (and on other factors, such as the color of the paper to be printed on). Therefore, the Crosfield scanner has certain "color correction" functions which allow the scanner operator to adjust for different inks or

paper. These functions use conversion, or "look up," tables to replace the digitized red, green, and blue color information with four new digital values which represent the amount of each of the printing inks which must be used to reproduce the shade and hue of the original pixel. This adjusted digitized information is then used to generate electrical impulses which are sent to lamps (or lasers) and which tell those lamps (or lasers) where to expose tiny spots on the separation negatives to create the required number, size and density of dots on each of the four separations. Each tiny spot on each film falls under the exposing light once and only once and is either fully exposed or not exposed at all. Printing plates are then created from the separations.

The '241 patent is a continuation-in part of serial number 595,815 filed April 2, 1984, since abandoned, which in turn was a continuation-in-part of abandoned application serial number 485,688 filed April 18, 1983. The file history of the '241 patent illustrates that claim one of the '688 application[6] was rejected as anticipated by a DuPont Magazine article and claims 1-5 were rejected as being obvious and unpatentable over the DuPont article in view of other cited references.

In the face of this rejection, the applicant chose to abandon the '688 application and file the '815 continuation-

in-part application. Before the examiner reviewed the '815 application the applicant voluntarily amended new claim one to include the "sequential" limitation at issue in Donnelley's motion for summary judgment. Claim one of the '815 application, as amended, reads as follows:

> 1. A method of printing on a sheet member a realistic image of an original, utilizing two different superimposed impressions with two different colouring media, comprising:
>
> creating a first printing plate by the sequential interposition of at least two different colour filters between the original and means for recording a first optical image,
>
> creating a second printing plate by the interposition of at least one filter between the original and means for recording a second optical image,
>
> and using said first and second plates to print the said different impressions with two different colouring media.

Subsequent to the voluntary amendment, but still prior to the examiner acting upon the '815 application, the applicant filed a renewed petition to make special wherein the applicant argued that the "invention" embodied in the '815 application was patentable over five prior art references discussed in the petition. In its arguments, the applicant stated that each of the five references did not

create a first printing plate by the "sequential interposition of at least two different colour filters between the original and means for recording a first optical image."

The examiner rejected the claims in the '815 patent citing both obviousness in view of the DuPont article and an additional reference and failure to provide an enabling disclosure.[7]

Following rejection of the '815 application, the applicant again filed a continuation-in-part application rather than amending the rejected claims. This continuation-in-part application issued without comment as the '241 patent. Claim one of the '241 patent, the independent claim at issue in these proceedings, reads as follows:

> 1. A method of printing on a sheet member a realistic reproduction of a colored original, utilizing a minimum of two different superimposed impressions, each with a different coloring medium, comprising:
>
> (a) providing a colored original,
>
> (b) creating a first printing plate intended to print a non-process red color, by
>
> (1) making a green filter exposure of the

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[7] The examiner also noted that the prior art discussed in the renewed petition to make special had been considered.

original on a first means for recording a first optical image,

(2) making a blue filter exposure of the original on said first means,

steps (1) and (2) being carried out sequentially in any order,

(c) creating a second printing plate intended to print a second color different from that printed by said first plate, by

(3) making a red filter exposure of the original on a second means for recording a second optical image,

(4) making a blue filter exposure of the original on said second means,

steps (3) and (4) being carried out sequentially in any order, and

(steps (b) and (c) being carried out in any order),

(d) providing a sheet member to receive two superimposed impressions, and

(e) using said first and second printing plates to print said red color and said different color, respectively, as the said superimposed impressions on said sheet member.

In its motion for summary judgment, Donnelley

contends that the process used to print their Yellow Pages directories does not literally infringe claim one of the '241 patent due to the requirement that the film exposures be made "sequentially". Additionally, Donnelley asserts that, as a result of the applicant's arguments contained in the renewed petition to make special, the doctrine of prosecution history estoppel prohibits Mark I from asserting a range of equivalents sufficient to encompass Donnelley's process. Finally, Donnelley contends that the two color process that it uses falls within the prior art thereby preventing Mark I from asserting infringement under the doctrine of equivalents.

Summary judgment is appropriate when "the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to judgment as a matter of law." FRCP 56(c). The moving party bears the burden of demonstrating the absence of genuine issues of material fact. *Conroy v Reebok Intl. Ltd.*, 14 F.3d 1570, 1575 (Fed Cir 1994). The moving party, however, need not produce evidence showing the absence of a genuine issue of material fact but rather may discharge its burden by showing the district court that there is an absence of evidence to support the non-moving party's case. *Id.*

> [W]here the nonmoving party will bear the burden of proof at trial on a dispositive issue, a summary judgment motion may properly be

> made in reliance solely on the 'pleadings, depositions, answers to interrogatories, and admissions on file.' Such a motion, whether or not accompanied by affidavits, will be 'made and supported as provided in this rule,' and Rule 56(e) therefore requires the nonmoving party to go beyond the pleadings and by her own affidavits, or by the 'depositions, answers to interrogatories, and admissions on file,' designate 'specific facts showing that there is a genuine issue for trial.

Celotex Corp. v *Catrett*, 106 S.Ct. 2548, 2553 (1986). The issue of patent infringement will be addressed under this standard.

II. CLAIM CONSTRUCTION

The determination of infringement is a two-step process: first, the court interprets the claim to determine its scope and meaning; second, the court determines whether the accused device is within the scope of the properly construed claim. *Dolly Inc.* v *Spalding & Evenflo Co.. Inc.*, 16 F.3d 394, 397 (Fed Cir 1994). Claim construction is a question of law for the court to determine based upon a review of the specification, prosecution history, other claims in the patent and, if necessary, extrinsic evidence such as expert testimony. *Texas Instruments Inc.* v *U.S. Int'l Trade Comm'n*, 988 F.2d

1165, 1171 (Fed Cir 1993).

Claim one requires that each recording means be exposed through two filters and that such exposures occur "sequentially in any order". Mark I suggests that the phrase "sequentially in any order" means "that the exposure is not through filters which are stacked one on top of the other."[8] In support of this interpretation Mark I submits the second affidavit of Mr. Southworth, its printing expert, wherein the affiant states:

> There is no emphasis, discussion or statement regarding the words 'sequential' or 'sequential interposition' in the Voluntary Amendment. To me, the insertion of the word 'sequential' makes it clear that the filters are not to be stacked one on top of the other (aligned along a common axis), as that would be inoperative.[9] Application S.N. 595,815 at page 4, lines 34-36 states, 'The filters are used sequentially, rather than together at the same time.' To me, this

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[8]Mark I neither made this argument nor submitted the supporting affidavit of Mr. Southworth to the Magistrate Judge. However, the court has elected to consider both the argument and the affidavit in deciding all issues addressed herein. 28 USC §636(b)(1), FRCP 72(b).

[9]In passing, the court notes that it is rare indeed that a patentee would include a limitation simply to exclude an inoperative embodiment as suggested in the second sentence of the quotation from Mr. Southworth's affidavit.

means that the filters are not to be stacked one on top of the other.

The definition of "sequentially" urged by Mark I is much more narrow than the ordinary meaning of the term. According to Webster's New World Dictionary, "sequence" means "[t]he following of one thing after another in chronological, causal, or logical order." Webster's New World Dictionary 1224 (3d ed. 1988). This definition does not suggest a "stacking" as suggested by Mark I. Nor is a "stacking" clearly required by the prosecution history or prior art before the court. While it is true that a patentee is free to be his own lexicographer, the ordinary meaning of a term is to be used unless a contradictory meaning is clearly set forth in the patent. *Hoganas AB v Dresser Industries. Inc.*, 9 F.3d 948, 951 (Fed Cir 1993) (giving a term in the claim its plain meaning because "[i]f [the patentee], who was responsible for drafting and prosecuting the patent, intended something different, it could have prevented this result through clearer drafting.") The '241 patent contains no such clear statement of the meaning of the term "sequentially." Rather, statements in the patent such as "[e]ach film is exposed sequentially through the two filters or with the equivalent two lights on the conventional scanner" support the court's use of the ordinary meaning of the term "sequentially".

Mark I further contends that the proper interpretation of the claim language requires the court to

resolve underlying issues of fact thereby preventing summary judgment. Claims are construed from the vantage point of one skilled in the art which can lead to the necessity to resolve factual issues. However, when the patent fails to put one skilled in the art on notice that the term has a definition other than its ordinary meaning, no factual issue is presented. Hoganas AB, 9 F.3d at 951. As a result, the term "sequential" as used in the patent has its ordinary meaning.

III. LITERAL INFRINGEMENT

After interpreting the claim, the court determines whether the accused device is within the scope of the construed claim, that is, whether the accused device or process includes every limitation or an equivalent of each limitation. *Dolly*, 16 F.3d 394. The Magistrate Judge did not consider literal infringement of claim one of the '241 patent evidently because he was under the impression that Mark I had conceded the issue.

> Plaintiffs submit that, while Donnelley does not literally infringe the claim, it does practice a process that is equivalent to the claim and, therefore, must be considered to be infringing.

However, as previously noted, in its briefs in opposition to the Magistrate Judge's recommended disposition, Mark I argues that Donnelley does literally infringe the '241

patent because the term "sequential" is properly interpreted as meaning that "the exposure is not through filters which are stacked one on top of the other." Based on the court's construction of the term "sequential", Donnelley is entitled to summary judgment on the issue of literal infringement. It is not disputed that the Crosfield scanner used by Donnelley exposes the separation film only once, "[e]ach tiny spot on each film falls under the exposing light once and only once and is either fully exposed or not exposed at all", whereas the claim requires double exposures made sequentially. Mr. Southworth stated as much in his first affidavit, "Donnelley (and Flying Color Graphics) do exactly every step called for by claim one of the Edwards patent -- except the use of the filters may not be sequential." (Emphasis added)

IV. DOCTRINE OF EQUIVALENTS

A process or device which does not literally infringe a patent claim may still infringe the claim under the doctrine of equivalents if the accused process appropriates the essence of the patented invention. *Hughes Aircraft Co. v United States*, 717 F.2d 1351 (Fed Cir 1983). Infringement under the doctrine of equivalents exists if the accused process performs substantially the same function in substantially the same way to obtain the same result as is set forth in the claim. *Graver Tank & Mfg. Co. v Linde Air Products*, 339 US 605 (1950). However, the doctrine of

equivalents cannot be used to ignore claim limitations. Dolly, 16 F.3d at 397-99. Each element set forth in the claim or its equivalent must be present in the accused device or process. *Id.* The doctrine of equivalents is limited in its application to the extent that it cannot be used to encompass (1) subject matter which the patentee relinquished during prosecution of the patent, the doctrine of prosecution history estoppel; or (2) subject matter which was present in the prior art. *Haynes Intern., Inc. v. Jessop Steel Co.*, 8 F.3d 1573, 1579 (Fed Cir 1993).

Donnelley contends in its motion for summary judgment that both limitations prevent claim one of the '241 patent from encompassing, under the doctrine of equivalents, the process used by Donnelley. The court need not address the issue of prosecution history estoppel because Mark I has failed to raise a genuine issue of material fact as to whether Donnelley's process is within the prior art and therefore beyond the reach of the doctrine of equivalents.

The doctrine of equivalents "may not be used to extend a patent holder's right to exclude beyond what could lawfully have been obtained in an original application." *We Care, Inc. V. Ultra-Mark Int'l Corp.*, 930 F.2d 1567, 1570 (Fed Cir 1991). When presented with Donnelley's argument, Mark I, rather than address the prior art with respect to the scope of equivalents being asserted, urged that the cited art did not invalidate claim one of the '241 patent. As a result, Mark I failed to dispute

the factual assertions actually made by Donnelley, i.e., that Donnelley's process was the same as those processes described by the prior art. There exists a fundamental difference between consideration of prior art when determining validity and consideration of prior art when determining infringement under the doctrine of equivalents. This difference was set forth in Donnelley's memorandum in support of its motion for summary judgment, the Magistrate Judge's Report and Recommendation and Donnelley's response to Mark I's objections. As state in *Wilson Sporting Goods v. David Geoffrey & Assoc.*, 904 F.2d 677, 685 (Fed Cir 1990), a case cited by both Donnelley and the Magistrate Judge:

> [I]t is important to remember that the burden is on Wilson [the patentee] to prove that the range of equivalents which it seeks would not ensnare the prior art Uniroyal ball. Leaving this burden on Wilson does not, of course, in any way undermine the presumed validity of Wilson's actual patent claims. In the present situation, Wilson's claims will remain valid whether or not Wilson persuades us that it is entitled to the range of equivalents sought here.

Mark I has failed to establish that a genuine issue of material fact exists as to whether the process used by Donnelley is within the prior art. Therefore, Donnelley is entitled to summary judgment on the issue of infringement under the doctrine of equivalents.

ORDERED: The objections of plaintiffs, Mark I Marketing Corporation and Mark I Marketing Corporation of America, to the Magistrate Judge's Report and Recommendation are overruled. Defendant R.R. Donnelley & Sons' motion for summary judgment is granted. Judgment in favor of defendant, R.R. Donnelley & Sons, and against plaintiffs, Mark I Marketing Corporation and Mark I Marketing Corporation of America, will be set forth on a separate document and entered in the civil docket. FRCP 58, 79(a).

ENTER:

S/George W. Lindberg
GEORGE W. LINDBERG
District Judge

DATED: OCT 28 1994